

Appl. No. 09/940,273

Amdt. Dated July 13, 2005

Reply to Office Action of January 13, 2005

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Withdrawn) An implantable cardioverter defibrillator for subcutaneous positioning between the third rib and the twelfth rib within a patient, the implantable cardioverter-defibrillator comprising:

a housing;

an electrical circuit located within the housing;

a first electrode coupled to the electrical circuit and located on the housing; and

a second electrode coupled to the electrical circuit.

2. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein at least a portion of the housing is non-planar.

3. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the housing has a length of approximately 3 centimeters to approximately 30 centimeters.

4. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the housing has a length of approximately 5 centimeters to approximately 20 centimeters.

5. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the housing has a length of approximately 5 centimeters to approximately 12 centimeters.

6. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the housing further comprises a depth, wherein the depth of the housing is less than approximately 15 millimeters.

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7. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the electrical circuit can provide monophasic waveform cardioversion-defibrillation for a patient's heart.

8. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the electrical circuit can provide multiphasic waveform cardioversion-defibrillation for a patient's heart.

9. (Withdrawn) The implantable cardioverter-defibrillator of claim 8, wherein the electrical circuit can provide biphasic waveform cardioversion-defibrillation for a patient's heart.

10. (Withdrawn) The implantable cardioverter-defibrillator of claim 8, wherein the electrical circuit can provide triphasic waveform cardioversion-defibrillation for a patient's heart.

11. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode can emit an effective field strength for shocking the patient's heart.

12. (Withdrawn) The implantable cardioverter-defibrillator of claim 11, wherein the effective field strength for shocking the patient's heart is approximately 25 J to approximately 50 J.

13. (Withdrawn) The implantable cardioverter-defibrillator of claim 11, wherein the effective field strength for shocking the patient's heart is approximately 50 J to approximately 75 J.

14. (Withdrawn) The implantable cardioverter-defibrillator of claim 11, wherein the effective field strength for shocking the patient's heart is approximately 75 J to approximately 100 J.

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15. (Withdrawn) The implantable cardioverter-defibrillator of claim 11, wherein the effective field strength for shocking the patient's heart is approximately 100 J to approximately 125 J.

16. (Withdrawn) The implantable cardioverter-defibrillator of claim 11, wherein the effective field strength for shocking the patient's heart is approximately 125 J to approximately 150 J.

17. (Withdrawn) The implantable cardioverter-defibrillator of claim 11, wherein the effective field strength for shocking the patient's heart is approximately 150 J.

18. (Withdrawn) The implantable cardioverter-defibrillator of claim 11, wherein the first electrode can further receive physiological information.

19. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode can receive physiological information.

20. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein at least a portion of the first electrode is non-planar.

21. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is substantially ellipsoidal in shape.

22. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is substantially thumbnail shaped.

23. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is substantially circular in shape.

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24. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is substantially square in shape.

25. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is substantially rectangular in shape.

26. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is substantially spade shaped.

27. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is less than approximately 2000 square millimeters in area.

28. (Withdrawn) The implantable cardioverter-defibrillator of claim 27, wherein the first electrode is between approximately 750 square millimeters to approximately 1000 square millimeters in area.

29. (Withdrawn) The implantable cardioverter-defibrillator of claim 27, wherein the first electrode is between approximately 500 square millimeters to approximately 750 square millimeters in area.

30. (Withdrawn) The implantable cardioverter-defibrillator of claim 27, wherein the first electrode is between approximately 250 square millimeters to approximately 500 square millimeters in area.

31. (Withdrawn) The implantable cardioverter-defibrillator of claim 27, wherein the first electrode is between approximately 100 square millimeters to approximately 250 square millimeters in area.

32. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein at least a portion of the housing surrounding the electrode is ceramic.

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33. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the second electrode is located on the housing.

34. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the housing further comprises a first end and a second end, wherein the first electrode is located on the first end of the housing and the second electrode is located on the second end of the housing.

35. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the second electrode is disposed on a lead.

36. (Withdrawn) The implantable cardioverter-defibrillator of claim 35, wherein the lead is approximately 5 centimeters to approximately 55 centimeters in length.

37. (Withdrawn) The implantable cardioverter-defibrillator of claim 36, wherein the lead is approximately 5 centimeters to approximately 15 centimeters in length.

38. (Withdrawn) The implantable cardioverter-defibrillator of claim 36, wherein the lead is approximately 15 centimeters to approximately 25 centimeters in length.

39. (Withdrawn) The implantable cardioverter-defibrillator of claim 36, wherein the lead is approximately 25 centimeters to approximately 35 centimeters in length.

40. (Withdrawn) The implantable cardioverter-defibrillator of claim 36, wherein the lead is approximately 35 centimeters to approximately 45 centimeters in length.

41. (Withdrawn) The implantable cardioverter-defibrillator of claim 36, wherein the lead is approximately 45 centimeters to approximately 55 centimeters in length.

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42. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is positioned approximately in the anterior portion of a patient's ribcage.

43. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the first electrode is positioned approximately in a parasternal region of the patient.

44. (Withdrawn) The implantable cardioverter-defibrillator of claim 43, wherein the first electrode is positioned approximately in a left parasternal region of the patient.

45. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the second electrode is positioned approximately in a posterior region of a patient's ribcage.

46. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the second electrode is positioned approximately in a paraspinal region of the patient.

47. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the second electrode is positioned approximately in a parascapular region of the patient.

48. (Withdrawn) The implantable cardioverter-defibrillator of claim 1, wherein the implantable cardioverter-defibrillator further comprises:

- a first vector end point defining the position of the first electrode;
- a second vector end point defining the position of the second electrode;
- an origin defining a position approximately within the patient's heart and between the first vector end point and the second vector end point; and
- a depolarization vector, wherein the depolarization vector defines an angle of separation between the first vector end point and the second vector end point with respect to the origin.

49. (Withdrawn) The implantable cardioverter-defibrillator of claim 48, wherein the angle of separation is between approximately 30 degrees and approximately 90 degrees.

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50. (Withdrawn) The implantable cardioverter-defibrillator of claim 48, wherein the angle of separation is between approximately 90 degrees and approximately 120 degrees.

51. (Withdrawn) The implantable cardioverter-defibrillator of claim 48, wherein the angle of the separation is between approximately 120 degrees and approximately 150 degrees.

52. (Withdrawn) The implantable cardioverter-defibrillator of claim 48, wherein the angle of the separation is between approximately 150 degrees and approximately 180 degrees.

53. (Previously Presented) An implantable cardioverter-defibrillator comprising:
a housing including a major surface;
an electrical circuit located within the housing;
a first subcutaneous electrode comprising an electrically active portion defined within the confines of the major surface of the housing to focus cardioversion-defibrillation energy emitted from the first electrode in a predetermined direction away from the major surface of the housing, the first electrode coupled to the electrical circuit; and
a second subcutaneous electrode coupled to the electrical circuit, wherein a cardioversion-defibrillation energy is delivered between the first and the second subcutaneous electrodes.

54. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein at least a portion of the housing is curved to focus cardioversion-defibrillation energy emitted from the first electrode in the predetermined direction.

55. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the housing has a length of approximately 3 centimeters to approximately 30 centimeters.

56. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the housing has a length of approximately 5 centimeters to approximately 20 centimeters.

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57. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the housing has a length of approximately 5 centimeters to approximately 12 centimeters.

58. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the housing further comprises a depth, wherein the cardioverter-defibrillator is less than approximately 15 millimeters.

59. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the electrical circuit can provide monophasic waveform cardioversion-defibrillation for a patient's heart.

60. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the electrical circuit can provide multiphasic waveform cardioversion-defibrillation for a patient's heart.

61. (Original) The implantable cardioverter-defibrillator of claim 60, wherein the electrical circuit can provide biphasic waveform cardioversion-defibrillation for a patient's heart.

62. (Original) The implantable cardioverter-defibrillator of claim 60, wherein the electrical circuit can provide triphasic waveform cardioversion-defibrillation for a patient's heart.

63. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein the first electrode can emit an energy for shocking the patient's heart.

64. (Previously Presented) The implantable cardioverter-defibrillator of claim 63, wherein the energy for shocking the patient's heart is approximately 25 J to approximately 50 J.

65. (Previously Presented) The implantable cardioverter-defibrillator of claim 63, wherein the energy for shocking the patient's heart is approximately 50 J to approximately 75 J.

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66. (Previously Presented) The implantable cardioverter-defibrillator of claim 63, wherein the energy for shocking the patient's heart is approximately 75 J to approximately 100 J.

67. (Previously Presented) The implantable cardioverter-defibrillator of claim 63, wherein the energy for shocking the patient's heart is approximately 100 J to approximately 125 J.

68. (Previously Presented) The implantable cardioverter-defibrillator of claim 63, wherein the energy for shocking the patient's heart is approximately 125 J to approximately 150 J.

69. (Previously Presented) The implantable cardioverter-defibrillator of claim 63, wherein the energy for shocking the patient's heart is approximately 150 J.

70. (Original) The implantable cardioverter-defibrillator of claim 63, wherein the first electrode can further receive sensory information.

71. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the first electrode can receive sensory information.

72. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein at least a portion of the first electrode is curved to focus cardioversion-defibrillation energy emitted from the first electrode in the predetermined direction.

73. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the first electrode is less than approximately 1000 square millimeters in area.

74. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein at least a portion of the housing on which the first electrode is defined is ceramic.

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75. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the second electrode is located on the housing.

76. (Previously Presented) An implantable cardioverter-defibrillator for subcutaneous positioning between the third rib and the twelfth rib within a patient, the implantable cardioverter-defibrillator comprising:

a housing;

an electrical circuit located within the housing;

a first electrode coupled to the electrical circuit, wherein the first electrode is positioned at a first point with respect to the patient's heart; and

a second electrode coupled to the electrical circuit, wherein the second electrode is positioned at a second point that is substantially on the opposite side of the patient's heart from the first point;

wherein the housing further comprises a first end and a second end, wherein the first electrode is located on the first end of the housing and the second electrode is located on the second end of the housing; wherein a cardioversion-defibrillation energy is delivered between the first and the second electrodes.

77. (Original) The implantable cardioverter-defibrillator of claim 53, wherein the second electrode is disposed on a lead.

78. (Original) The implantable cardioverter-defibrillator of claim 77, wherein the lead is approximately 5 centimeters to approximately 55 centimeters in length.

79. (Original) The implantable cardioverter-defibrillator of claim 78, wherein the lead is approximately 5 centimeters to approximately 15 centimeters in length.

80. (Original) The implantable cardioverter-defibrillator of claim 78, wherein the lead is approximately 15 centimeters to approximately 25 centimeters in length.

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81. (Original) The implantable cardioverter-defibrillator of claim 78, wherein the lead is approximately 25 centimeters to approximately 35 centimeters in length.

82. (Original) The implantable cardioverter-defibrillator of claim 78, wherein the lead is approximately 35 centimeters to approximately 45 centimeters in length.

83. (Original) The implantable cardioverter-defibrillator of claim 78, wherein the lead is approximately 45 centimeters to approximately 55 centimeters in length.

84. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein the first electrode is adapted to be disposed at a first point approximately in the anterior portion of a patient's ribcage.

85. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein the first electrode is adapted to be disposed at a first point approximately in a parasternal region of the patient.

86. (Previously Presented) The implantable cardioverter-defibrillator of claim 85, wherein the first electrode is adapted to be disposed at a first point approximately in a left parasternal region of the patient.

87. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein the second electrode is adapted to be disposed at a second point approximately in a posterior region of a patient's ribcage.

88. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein the second electrode is adapted to be disposed at a second point approximately in a paraspinal region of the patient.

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89. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein the second electrode is adapted to be disposed at a second point approximately in a parascapular region of the patient.

90. (Previously Presented) The implantable cardioverter-defibrillator of claim 53, wherein the second electrode is spaced from the first electrode by a length such that when the first electrode is disposed at a first predetermined subcutaneous position between the third rib and the twelfth rib within the patient, the length of the spacing provides for the second electrode to be disposed at a second predetermined subcutaneous position between the third rib and the twelfth rib within the patient such that a depolarization vector is defined between the first electrode and the second electrode, wherein the depolarization vector defines an angle of separation between the first electrode and the second electrode with respect to a point within the patient's heart, and wherein a cardioversion-defibrillation energy is delivered between the first and the second subcutaneous electrodes.

91. (Original) The implantable cardioverter-defibrillator of claim 90, wherein the angle of separation is between approximately 30 degrees and approximately 90 degrees.

92. (Original) The implantable cardioverter-defibrillator of claim 90, wherein the angle of separation is between approximately 90 degrees and approximately 120 degrees.

93. (Original) The implantable cardioverter-defibrillator of claim 90, wherein the angle of separation is between approximately 120 degrees and approximately 150 degrees.

94. (Original) The implantable cardioverter-defibrillator of claim 90, wherein the angle of separation is between approximately 150 degrees and approximately 180 degrees.

95. (Previously Presented) An implantable cardioverter defibrillator for subcutaneous positioning between the third rib and the twelfth rib within a patient, the implantable cardioverter-defibrillator comprising:

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a housing;

an electrical circuit located within the housing;

a first subcutaneous electrode coupled to the electrical circuit and disposed on the housing; and

a second subcutaneous electrode coupled to the electrical circuit, wherein the second electrode is spaced from the first electrode by a length such that when the first subcutaneous electrode is disposed at a first predetermined subcutaneous position between the third rib and the twelfth rib within the patient, the length allows the second subcutaneous electrode to be subcutaneously disposed at a second predetermined subcutaneous position between the third rib and the twelfth rib within the patient such that a degree of separation between the first and second subcutaneous electrodes is defined about the patients ribcage with respect to a point within the patient's heart, the degree of separation being in the range of approximately 30 degrees to approximately 180 degrees, with respect to the point within the patient's heart, and wherein a cardioversion-defibrillation energy is delivered between the first and the second subcutaneous electrodes.

96. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein at least a portion of the housing is curved to focus cardioversion-defibrillation energy emitted from the first electrode in a predetermined direction.

97. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the housing has a length of approximately 3 centimeters to approximately 30 centimeters.

98. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the housing has a length of approximately 5 centimeters to approximately 20 centimeters.

99. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the housing has a length of approximately 5 centimeters to approximately 12 centimeters.

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100. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the housing further comprises a depth, wherein the depth is less than approximately 15 millimeters.

101. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the electrical circuit can provide monophasic waveform cardioversion-defibrillation for a patient's heart.

102. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the electrical circuit can provide multiphasic waveform cardioversion-defibrillation for a patient's heart.

103. (Original) The implantable cardioverter-defibrillator of claim 102, wherein the electrical circuit can provide biphasic waveform cardioversion-defibrillation for a patient's heart.

104. (Original) The implantable cardioverter-defibrillator of claim 102, wherein the electrical circuit can provide triphasic waveform cardioversion-defibrillation for a patient's heart.

105. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the first electrode can emit an energy for shocking the patient's heart.

106. (Previously Presented) The implantable cardioverter-defibrillator of claim 105, wherein the energy for shocking the patient's heart is approximately 25 J to approximately 50 J.

107. (Previously Presented) The implantable cardioverter-defibrillator of claim 105, wherein the energy for shocking the patient's heart is approximately 50 J to approximately 75 J.

108. (Previously Presented) The implantable cardioverter-defibrillator of claim 105, wherein the energy for shocking the patient's heart is approximately 75 J to approximately 100 J.

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109. (Previously Presented) The implantable cardioverter-defibrillator of claim 105, wherein the energy for shocking the patient's heart is approximately 100 J to approximately 125 J.

110. (Previously Presented) The implantable cardioverter-defibrillator of claim 105, wherein the energy for shocking the patient's heart is approximately 125 J to approximately 150 J.

111. (Previously Presented) The implantable cardioverter-defibrillator of claim 105, wherein the energy for shocking the patient's heart is approximately 150 J.

112. (Original) The implantable cardioverter-defibrillator of claim 105, wherein the first electrode can further receive sensory information.

113. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the first electrode can receive sensory information.

114. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein at least a portion of the first electrode is curved to focus cardioversion-defibrillation energy emitted from the first electrode in a predetermined direction.

115. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the first electrode is less than approximately 2000 square millimeters in area.

116. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein at least a portion of the housing is ceramic.

117. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the second electrode is located on the housing.

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118. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the housing further comprises a first end and a second end, wherein the first electrode is located on the first end of the housing and the second electrode is located on the second end of the housing.

119. (Original) The implantable cardioverter-defibrillator of claim 95, wherein the second electrode is disposed on a lead.

120. (Original) The implantable cardioverter-defibrillator of claim 119, wherein the lead is approximately 5 centimeters to approximately 55 centimeters in length.

121. (Original) The implantable cardioverter-defibrillator of claim 120, wherein the lead is approximately 5 centimeters to approximately 15 centimeters in length.

122. (Original) The implantable cardioverter-defibrillator of claim 120, wherein the lead is approximately 15 centimeters to approximately 25 centimeters in length.

123. (Original) The implantable cardioverter-defibrillator of claim 120, wherein the lead is approximately 25 centimeters to approximately 35 centimeters in length.

124. (Original) The implantable cardioverter-defibrillator of claim 120, wherein the lead is approximately 35 centimeters to approximately 45 centimeters in length.

125. (Original) The implantable cardioverter-defibrillator of claim 120, wherein the lead is approximately 45 centimeters to approximately 55 centimeters in length.

126. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the first predetermined subcutaneous position is adjacent the anterior portion of a patient's ribcage.

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127. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the first predetermined subcutaneous position is in a parasternal region of the patient.

128. (Previously Presented) The implantable cardioverter-defibrillator of claim 127, wherein the first predetermined subcutaneous position is in a left parasternal region of the patient.

129. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the second predetermined subcutaneous position is adjacent a posterior region of a patient's ribcage.

130. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the second predetermined subcutaneous position is in a paraspinal region of the patient.

131. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the second predetermined subcutaneous position is in a parascapular region of the patient.

132. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the degree of separation of the first and second subcutaneous electrodes is approximately 30 degrees to approximately 60 degrees.

133. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the degree of separation of the first and second subcutaneous electrodes is approximately 60 degrees to approximately 90 degrees.

134. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the degree of separation of the first and second subcutaneous electrodes is approximately 90 degrees to approximately 120 degrees.

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135. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the degree of separation of the first and second subcutaneous electrodes is approximately 120 degrees to approximately 150 degrees.

136. (Previously Presented) The implantable cardioverter-defibrillator of claim 95, wherein the degree of separation of the first and second subcutaneous electrodes is approximately 150 degrees to approximately 180 degrees.

137. (Withdrawn) A method of inserting an implantable cardioverter-defibrillator within a patient, the method comprising the steps of:

providing a cardioverter-defibrillator comprising a housing, an electrical circuit located within the housing, a first electrode located on the housing, and a second electrode;

making a single incision into the patient;

advancing the cardioverter-defibrillator through the single incision and subcutaneously over approximately the anterior portion of a patient's ribcage; and

orienting the second electrode on substantially the opposite side of a patient's heart from the first electrode.

138. (Withdrawn) The method of claim 137, wherein at least a portion of the cardioverter-defibrillator is non-planar.

139. (Withdrawn) The method of claim 137, wherein the cardioverter-defibrillator has a length of approximately 3 centimeters to approximately 30 centimeters.

140. (Withdrawn) The method of claim 137, wherein the cardioverter-defibrillator has a length of approximately 5 centimeters to approximately 20 centimeters.

141. (Withdrawn) The method of claim 137, wherein the cardioverter-defibrillator has a length of approximately 5 centimeters to approximately 12 centimeters.

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142. (Withdrawn) The method of claim 137, wherein the cardioverter-defibrillator further comprises a depth, wherein the cardioverter-defibrillator is less than approximately 15 millimeters.

143. (Withdrawn) The method of claim 137, wherein the electrical circuit can provide monophasic waveform cardioversion-defibrillation for a patient's heart.

144. (Withdrawn) The method of claim 137, wherein the electrical circuit can provide multiphasic waveform cardioversion-defibrillation for a patient's heart.

145. (Withdrawn) The method of claim 144, wherein the electrical circuit can provide biphasic waveform cardioversion-defibrillation for a patient's heart.

146. (Withdrawn) The method of claim 144, wherein the electrical circuit can provide triphasic waveform cardioversion-defibrillation for a patient's heart.

147. (Withdrawn) The method of claim 137, wherein the first electrode can emit an effective field strength for shocking the patient's heart.

148. (Withdrawn) The method of claim 147, wherein the effective field strength for shocking the patient's heart is approximately 25 J to approximately 50 J.

149. (Withdrawn) The method of claim 147, wherein the effective field strength for shocking the patient's heart is approximately 50 J to approximately 75 J.

150. (Withdrawn) The method of claim 147, wherein the effective field strength for shocking the patient's heart is approximately 75 J to approximately 100 J.

151. (Withdrawn) The method of claim 147, wherein the effective field strength for shocking the patient's heart is approximately 100 J to approximately 125 J.

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152. (Withdrawn) The method of claim 147, wherein the effective field strength for shocking the patient's heart is approximately 125 J to approximately 150 J.

153. (Withdrawn) The method of claim 147, wherein the effective field strength for shocking the patient's heart is approximately 150 J.

154. (Withdrawn) The method of claim 147, wherein the first electrode can further receive sensory information.

155. (Withdrawn) The method of claim 137, wherein the first electrode can receive sensory information.

156. (Withdrawn) The method of claim 137, wherein at least a portion of the first electrode is non-planar.

157. (Withdrawn) The method of claim 137, wherein the first electrode is less than approximately 2000 square millimeters in area.

158. (Withdrawn) The method of claim 137, wherein at least a portion of the housing surrounding the electrode is ceramic.

159. (Withdrawn) The method of claim 137, wherein the second electrode is located on the housing.

160. (Withdrawn) The method of claim 137, wherein the housing further comprises a first end and a second end, wherein the first electrode is located on the first end of the housing and the second electrode is located on the second end of the housing.

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161. (Withdrawn) The method of claim 137, wherein the second electrode is disposed on a lead.

162. (Withdrawn) The method of claim 161, wherein the lead is approximately 5 centimeters to approximately 55 centimeters in length.

163. (Withdrawn) The method of claim 161, wherein the lead is approximately 5 centimeters to approximately 15 centimeters in length.

164. (Withdrawn) The method of claim 161, wherein the lead is approximately 15 centimeters to approximately 25 centimeters in length.

165. (Withdrawn) The method of claim 161, wherein the lead is approximately 25 centimeters to approximately 35 centimeters in length.

166. (Withdrawn) The method of claim 161, wherein the lead is approximately 35 centimeters to approximately 45 centimeters in length.

167. (Withdrawn) The method of claim 161, wherein the lead is approximately 45 centimeters to approximately 55 centimeters in length.

168. (Withdrawn) The method of claim 137, wherein the single incision is made approximately at the level of the cardiac apex.

169. (Withdrawn) The method of claim 137, wherein the single incision is made approximately in the left anterior axillary line.

170. (Withdrawn) The method of claim 137, wherein the first electrode is advanced approximately in a parasternal region of the patient.

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171. (Withdrawn) The method of claim 170, wherein the first electrode is advanced approximately in a left parasternal region of the patient.

172. (Withdrawn) The method of claim 137, wherein the second electrode is oriented approximately in a posterior region of a patient's ribcage.

173. (Withdrawn) The method of claim 137, wherein the second electrode is oriented approximately in a paraspinal region of the patient.

174. (Withdrawn) The method of claim 137, wherein the second electrode is oriented approximately in a parascapular region of the patient.

175. (Withdrawn) The method of claim 137, wherein the first electrode is approximately 30 degrees to approximately 60 degrees apart from the second electrode, with respect to the patient's heart.

176. (Withdrawn) The method of claim 137, wherein the first electrode is approximately 60 degrees to approximately 90 degrees apart from the second electrode, with respect to the patient's heart.

177. (Withdrawn) The method of claim 137, wherein the first electrode is approximately 90 degrees to approximately 120 degrees apart from the second electrode, with respect to the patient's heart.

178. (Withdrawn) The method of claim 137, wherein the first electrode is approximately 120 degrees to approximately 150 degrees apart from the second electrode, with respect to the patient's heart.

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179. (Withdrawn) The method of claim 137, wherein the first electrode is approximately 150 degrees to approximately 180 degrees apart from the second electrode, with respect to the patent's heart.

180. (Withdrawn) A method of inserting an implantable cardioverter-defibrillator within a patient, the method comprising the steps of:

providing a cardioverter-defibrillator comprising a housing, an electrical circuit located within the housing, a first electrode located on the housing, and a second electrode;

making a single incision into the patient;

advancing the cardioverter-defibrillator through the single incision and subcutaneously over approximately the posterior portion of a patient's ribcage; and

orienting the second electrode on substantially the opposite side of a patient's heart from the first electrode.

181. (Withdrawn) The method of claim 180, wherein at least a portion of the cardioverter-defibrillator is non-planar.

182. (Withdrawn) The method of claim 180, wherein the cardioverter-defibrillator has a length of approximately 3 centimeters to approximately 30 centimeters.

183. (Withdrawn) The method of claim 180, wherein the cardioverter-defibrillator has a length of approximately 5 centimeters to approximately 20 centimeters.

184. (Withdrawn) The method of claim 180, wherein the cardioverter-defibrillator has a length of approximately 5 centimeters to approximately 12 centimeters.

185. (Withdrawn) The method of claim 180, wherein the cardioverter-defibrillator further comprises a depth, wherein the cardioverter-defibrillator is less than approximately 15 millimeters.

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186. (Withdrawn) The method of claim 180, wherein the electrical circuit can provide monophasic waveform cardioversion-defibrillation for a patient's heart.

187. (Withdrawn) The method of claim 180, wherein the electrical circuit can provide multiphasic waveform cardioversion-defibrillation for a patient's heart.

188. (Withdrawn) The method of claim 187, wherein the electrical circuit can provide biphasic waveform cardioversion-defibrillation for a patient's heart.

189. (Withdrawn) The method of claim 187, wherein the electrical circuit can provide triphasic waveform cardioversion-defibrillation for a patient's heart.

190. (Withdrawn) The method of claim 180, wherein the first electrode can emit an effective field strength for shocking the patient's heart.

191. (Withdrawn) The method of claim 190, wherein the effective field strength for shocking the patient's heart is approximately 25 J to approximately 50 J.

192. (Withdrawn) The method of claim 190, wherein the effective field strength for shocking the patient's heart is approximately 50 J to approximately 75 J.

193. (Withdrawn) The method of claim 190, wherein the effective field strength for shocking the patient's heart is approximately 75 J to approximately 100 J.

194. (Withdrawn) The method of claim 190, wherein the effective field strength for shocking the patient's heart is approximately 100 J to approximately 125 J.

195. (Withdrawn) The method of claim 190, wherein the effective field strength for shocking the patient's heart is approximately 125 J to approximately 150 J.

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196. (Withdrawn) The method of claim 190, wherein the effective field strength for shocking the patient's heart is approximately 150 J.

197. (Withdrawn) The method of claim 190, wherein the first electrode can further receive sensory information.

198. (Withdrawn) The method of claim 180, wherein the first electrode can receive sensory information.

199. (Withdrawn) The method of claim 180, wherein at least a portion of the first electrode is non-planar.

200. (Withdrawn) The method of claim 180, wherein the first electrode is less than approximately 100 square millimeters in area.

201. (Withdrawn) The method of claim 180, wherein at least a portion of the housing surrounding the electrode is ceramic.

202. (Withdrawn) The method of claim 180, wherein the second electrode is located on the housing.

203. (Withdrawn) The method of claim 180, wherein the housing further comprises a first end and a second end, wherein the first electrode is located on the first end of the housing and the second electrode is located on the second end of the housing.

204. (Withdrawn) The method of claim 180, wherein the second electrode is disposed on a lead.

205. (Withdrawn) The method of claim 204, wherein the lead is approximately 5 centimeters to approximately 55 centimeters in length.

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206. (Withdrawn) The method of claim 204, wherein the lead is approximately 5 centimeters to approximately 15 centimeters in length.

207. (Withdrawn) The method of claim 204, wherein the lead is approximately 15 centimeters to approximately 25 centimeters in length.

208. (Withdrawn) The method of claim 204, wherein the lead is approximately 25 centimeters to approximately 35 centimeters in length.

209. (Withdrawn) The method of claim 204, wherein the lead is approximately 35 centimeters to approximately 45 centimeters in length.

210. (Withdrawn) The method of claim 204, wherein the lead is approximately 45 centimeters to approximately 55 centimeters in length.

211. (Withdrawn) The method of claim 180, wherein the first electrode is advanced approximately in a paraspinal region of the patient.

212. (Withdrawn) The method of claim 180, wherein the first electrode is advanced approximately in a parascapular region of the patient.

213. (Withdrawn) The method of claim 180, wherein the second electrode is oriented approximately in a parasternal region of the patient.

214. (Withdrawn) The method of claim 213, wherein the second electrode is oriented approximately in a left parasternal region of the patient.

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215. (Withdrawn) The method of claim 180, wherein the first electrode is approximately 30 degrees to approximately 60 degrees apart from the second electrode, with respect to the patent's heart.

216. (Withdrawn) The method of claim 180, wherein the first electrode is approximately 60 degrees to approximately 90 degrees apart from the second electrode, with respect to the patent's heart.

217. (Withdrawn) The method of claim 180, wherein the first electrode is approximately 90 degrees to approximately 120 degrees apart from the second electrode, with respect to the patent's heart.

218. (Withdrawn) The method of claim 180, wherein the first electrode is approximately 120 degrees to approximately 150 degrees apart from the second electrode, with respect to the patent's heart.

219. (Withdrawn) The method of claim 180, wherein the first electrode is approximately 150 degrees to approximately 180 degrees apart from the second electrode, with respect to the patent's heart.